Driving Job Growth: Small Business Innovation and Research

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Testimony of
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Introductions

My name is Linden Rhoads, and I would like to thank Senator Cantwell and Ms. Contreras Sweet for the opportunity to present on behalf of the University of Washington today. I am a technology entrepreneur, now a Vice Provost at UW, and lead the university's Center for Commercialization, known as "C4C".

Over the past 5 years, C4C staff have helped UW start-ups win \$20.5M in SBIR / STTR grants, with another \$10M of proposals filed and pending. These grants provide a critical bridge to private investment for our university life science, materials, and technology start-ups.

C4C is more than "tech transfer" for the University of Washington. Five years ago, we reorganized TechTransfer into C4C to provide the greater assistance and functions – mentorship, talent recruitment, and FUNDING necessary if UW is to emphasize spin-out of start-ups around our innovation rather than rely on license to larger existing companies. We have built an extensive ecosystem for innovation entrepreneurship around the UW.

The University of Washington is currently ranked #1 in the nation for licenses executed annually, #1 for the # of distinct innovations under license, and probably most importantly for our regional economy and our faculty, last year we were among the top five universities in the country for launching start-ups.

We launched 17 technology start-ups last year, more than double UW's ten-year run rate of 7 on average, and we are on track to launch another 17 this fiscal year, which ends in a couple of months.

C4C supported start-ups are qualitatively improved from the past – with larger target markets, customer validation, more experienced management—they are more worthy of *funding*. But they are still often painfully early in stage, and Gap funding, including SBIR and STTR awards, is an essential resource.

The key aspects to our success are:

- First and foremost, a world-class research base;
- expert commercialization staff;
- deep engagement of the business community, of researchers, and of students;
- and gap funding.

Gap funding – general need

A persistent challenge to technology start-ups in our region is to the dearth of early stage funding. In Washington State, the angel and venture communities mirror our industry and are strongest in software, in retail, and in e-commerce. There is are sector-specialized angel groups for clean tech and medical device, that are increasingly active, but it is much harder to raise money in life sciences or material science.

For start-ups in the life sciences, there is just a very predictable "valley of death" between the point to which NIH will fund and the proof-of-concept that investors require to risk capital. For start-ups in a nascent sector such as clean tech, it's unclear whether technologies proven to perform and better for the environment can compete on price in the marketplace, until there is a carbon tax for example. In sectors where there is so much uncertainty, investors have have a hard time understanding which investments aren't strategic philanthropy. Young companies need SBIR grants to give them time to make the necessary showing of venture worthiness.

The funding gap actually has many dimensions, and our start-ups and their investors need to see the overall funding plan. UW C4C has assembled a variety of funding entities and strategies to address the gap, from a

significant budget to provide up to \$50K in commercialization funds and support for post-docs while the project is still inside the UW, to the W Fund, a \$20M university-affiliated angel fund committed to investing exclusively in innovation-based start-ups spinning out of the research institutions in Washington State.

As part of our gap funding initiatives, we provide a full-time grant writer to help UW start-up teams apply for SBIR and STTR funding. The process and focus of these proposals is different enough from those for basic research grants, that we are able to provide real assistance to the researchers in pursuing these funding opportunities. Over the last five years, we have provided direct assistance to our start-ups in winning \$20.5M in SBIR and STTR awards.

SBIR / STTR and the gap

These grants provide BUT FOR non-dilutive capital to our technology startups. Often an SBIR award is the earliest capital that enables the technical team to launch the company.

An SBIR or STTR award helps technology start-up companies go on to raise private risk capital. Angel investors see an advantage not just in the leverage effect on their investment, but also in the technical validation that an SBIR or STTR award provides.

To produce even more impact from its investments in the SBIR and STTR programs, the federal government could give preference to those companies that can demonstrate that they are actively pursuing private investment. We have numerous examples of UW spin-outs which fulfilled the promise of SBIR, by leveraging this critical federal support to hire talent, then succeeding on garnering risk capital, and traction with development partners and customers.